

## Green Purchasing Our commitment is to purchase products with less environmental impact from suppliers focused on environmental issues.

As part of our efforts to reduce the environmental impact of our activities, we are committed to *green purchasing* in our supply chains. This is unlike the conventional way of purchasing, as it doesn't only take into account the quality, price and delivery date when purchasing products, but also the environmental aspect. We push green purchasing as a priority in our mid-term environmental plan. Our ultimate goal is to purchase only environmentally friendly products apart from crude oil and petroleum products and to give priority to suppliers focused on environmental initiatives.

In FY 2003, we began formalizing in-house standards for green purchasing and actually started making some of our purchases in accordance with these standards. Our *Green Purchasing Standards* include two types of standards to encourage the purchase of environmentally friendly products: one for the specific environmental impact of each product and the other for assessment of the supplier's environmental consciousness.

### Products standards are set for the following areas:

- Consumable (copy paper, office and stationery supplies, lighting apparatus, fixtures and fittings, office furniture, copiers, automobiles)
- Construction and construction equipment and materials (oil refineries, oil terminals, SS)
- System equipment (PCs, printers, scanners, displays, communication equipment)
- Sales promotion materials

Questionnaires are submitted to suppliers and priority is given to companies that meet or exceed certain standards for environmental consciousness. We have also started making approaches to those who have not yet met the standards, seeking to persuade them to adopt the standards.

In FY 2004, we plan to set standards for all areas and upgrade standards in all areas; at the same time, we will assess our results. Many green products have been produced, but there are still no clear standards for a number of products. Therefore, to establish the standards for environmental impact of products, it is necessary to gather information, expand the range of items covered under Green Standard and upgrade these standards for each product.

## Zero Emissions We are working towards the reduction of industrial waste to zero emissions.

### Industrial Waste

We have reduced industrial waste from our oil refineries. In the FY 2003 we achieved 87.4% reduction of landfill disposal from FY 1990 (our target was 81% reduction). In FY 2004 our target is to achieve zero emissions by reducing the landfill disposal-total waste generation ratio to a maximum 1.5%.

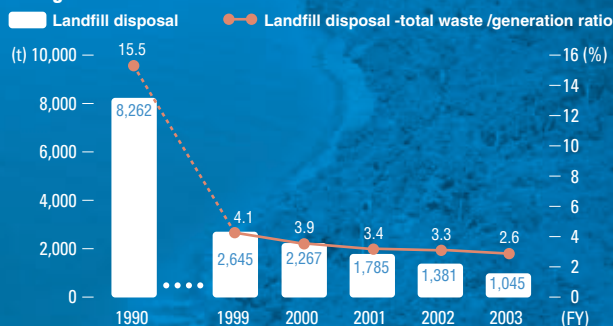
**Reference** For details, please see p. 21 of this report, p. 11 of the Data Book.

### Offices

As our aim to zero waste, Office Clean-Up Team consisted of the manager of each business unit has been established. The OCU Team discusses measures for waste reduction through the "3Rs" (reduce, reuse, recycle).

**Reference** For details, please see p. 24 of this report.

Change in amount of industrial waste



## Soil Conservation **We will attempt to reduce soil contamination through risk management.**

In June 2002, Cosmo Oil Group set up a guide called "Measures for Soil Conservation". Our company as a whole endeavor to prevent the risk from soil contamination, which is one of the priorities in our mid-term environmental plan.

### Measures for Soil Conservation

- We will conduct soil inspection systematically at Cosmo Oil-owned and affiliated facilities as well as the sales facilities of Cosmo brand products and will take measures as deemed necessary.

### Action for Soil Conservation

- We carry out the following activities to prevent leaks of petroleum products and minimize the environmental impact in the event of a leak.
- In FY 2002, we implemented risk assessments of the soil contamination at approximately 5,300 SS, including dealers. We provided guidance to some authorized dealers as deemed necessary.
- Based on findings from the risk assessments, we have conducted systematic soil inspections at Cosmo Oil-owned SS in descending order of risk. In FY 2003, responding to these findings, we conducted clean-up operations at 17 SS including those that are no longer in operation.
- As a prevention measure against soil contamination caused by leaks of petroleum products, we have implemented educational seminars for our employees regarding the importance of soil conservation and the day-to-day management of facilities. We have also conducted voluntary safety inspections of underground tanks, in addition to inspections required by law since FY 2002.
- We have endeavored to prevent soil contamination in other sites by careful maintenance and daily inspections of the sites. We have also planned soil inspections of 11 sites based on their business and operational history and commenced actual inspections, to be completed by the end of FY 2004.

## Environmental Accounting **In order to promote effective preservation of the environment, we compile and disclose information relating to environmental activities.**

In order to promote effective preservation of the environment, we systematically collect data on the environmental cost, benefit and economic benefit. The following is an overview of environmental accounting in FY 2003.

### ➤ Environmental Cost

This includes the cost of prevention of pollution, desulfurization of petroleum and environmental R&D. In FY 2003, the investment was 11.4 billion yen, while expenditure was 47 billion yen.

**Reference** For details, please see p.15 of the Data Book.

### ➤ Economic Benefit

Energy savings resulting from using co-generation facilities and patent income from R&D generated total economic benefit equivalent to 2.8 billion yen.

### ➤ Environmental Benefit

The environmental impact of our business activities show the amount of CO<sub>2</sub> conversion calculated using the EPS\*1 method increased by 329,000 tons to 5,254,000 tons, on account of increased crude oil throughput and upgrading of our refining process. The environmental impact of use of our petroleum products as seen in CO<sub>2</sub> conversion increased by 3,643,000 tons to 80,694,000 tons.

**Reference** For details, please see p.14, 16 of the Data Book.

\*1 EPS (Environmental Priority Strategies in Product Design): A life-cycle impact assessment method developed by a research team led by a Swedish environmental research institute (IVL) and managed by the Center for Environmental Assessment of Products and Material Systems in Chalmers University of Technology in Sweden. Regarding the conversion method based on the EPS method, please refer to p. 14 of the Data Book.